

# *METHOD AND SYSTEM FOR CANCELLATION OF ECHOES AND NOISES IN ENVIRONMENTS WITH VARIABLE ACOUSTIC CONDITIONS AND HIGH FEEDBACK*

## **Abstract**

Method and system for canceling echoes and noises in environments with variable acoustic conditions and high feedback, such as the interior of an automotive vehicle, permitting audible communication between the occupants, comprising one/several microphone/s (1) for a speech signal (5) and A/D, D/A converters, amplification and filtering means generating an electric signal (13) reproduced as an acoustic signal (7) by a speaker (3), and an echo canceller (15) using said signal (13) and an electric signal (10) from the microphone integrating the feedback of said signal (7), another speech signal (5) and noise (9) seized by the microphone (1), the system (15) being applied to eliminating said feedback, the proposed method and system providing an additional filtering of an electric output signal (11) of the canceling device (15), after

treatment of said signal, comprising a time variant filter that suppresses the residual acoustic echo not cancelled by the system (15) and the noise seized by said microphone/s (1).